



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/530,206

04/04/2005

Etienne Duguet

0512-1269

9621

466 7590 10/14/2008

YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

LE, HOA T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102/103

2. Claims 24-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Turner (US 4,213,886).*

Turner teaches an aluminum flake coated with a silane (col. 3, lines 9-15); therefore, the bond formed from the coating will be Al-O-Si-R. The coating is free of fatty acid or fatty acid salt as the coating does not involve a fatty acid or its salt. Further, Turner teaches a coating method that is displacing the long-chain organic acids of the conventional method with phosphate ions (col. 5, lines 28-33). This disclosure is to confirm that the coating is totally free of fatty acids and their salts. The coating is complete improvement over the conventional coated aluminum flakes (col. 5, lines 20-24); therefore, it is necessarily substantially free of surface oxidation layer.

Claims 25-26: See col. 2, lines 45-55.

Claim 27: See col. 2, lines 58-62 where wide aspect ratio is envisioned.

Claim 28: See col. 5, lines 2-8.

Claim 29: See col. 3, line 50 to col. 4, line 5.

Claim 30: At col. 4, lines 60+, coating amount of silane over the aluminum surface is taught. Such method would necessarily yield a mean amount of hydrocarbon bonded to the aluminum flake as claimed.

* Cited by Applicant.

Art Unit: 1794

Claim 31: See col. 2, lines 38-45 and 62-68.

3. Claims 27 and 32-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al (US 4,213,886) in view of either Karton et al (US 5,531,930) or Hashizume (US 5,944,886).

Claim 27: Turner teaches the claimed coated aluminum particles as discussed in section 2 above. At col. 2, lines 58-62, Turner teaches that an increase in aspect ratio of the aluminum flakes would reduce the flake concentration for the same metallic effect. Therefore, one of ordinary skill in the art would be motivated to increase the aspect ratio of the aluminum flakes if cost-saving is the focus.

Claims 32-46: Turner teaches a method of coating aluminum flakes with silane by the conventional dispersion of the aluminum flakes in the silane coating material (See Turner, col. 3, lines 9-15). However, Turner does not elaborate what the conventional dispersion entails. Hashizume discusses various mechanical deforming processes, including ball milling, as conventional dispersion of aluminum flakes (see Hashizume, col. 4, lines 56-60). Therefore, one of ordinary skill in the art would have found it obvious to apply any of these conventional dispersion approaches in dispersing the aluminum in silane coating material. Alternatively, Karton states that applying external pressure to aluminum flakes during coating process would (1) reduce the amount of coating material and (2) increase the bulk density of the final coated aluminum without any appreciable loss in mass extinction characteristics (See Karton, col. 3, lines 47-63).

Art Unit: 1794

and col. 4, lines 42-60). Therefore, one of ordinary skill in the art would have found it obvious to apply a coating on aluminum flakes by mechanical deforming the flakes.

Conclusion

4. Applicant's amendment introducing the fatty-acid free limitation into the instant claims necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/
Primary Examiner, Art Unit 1794

October 9, 2008